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ABSTRACT

A learning "recipe" for designing physical activity programs for older adults combines the "ingredients" of safety, relevancy, progression, maturity, motivation, practice, encouragement, fun, feedback, and love. Because the aged represent an increasing number in our society (estimates predict by the year 2000, over 50 million people will be over the age of 65), physical education teachers must start preparing to meet the challenges that this growing number of older adults will present. Worthwhile and relevant programs need to be developed along with specific guidelines for designing skill development programs for the aged. The most effective physical education teachers will be those who: (1) consider the maturation levels of their clients; (2) design fun activities; (3) provide safe learning environments; (4) provide expertise in developing practice routines; (5) use motivational techniques to inspire older adults; (6) offer encouragement; (7) provide appropriate and timely feedback; (8) attempt to make activities relevant; (9) design programs based on progression; and (10) show love to their clients through their actions. (CJ)

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GUIDELINES FOR IMPROVING PERFORMANCE IN THE AGED

by

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The aged represent an increasing number in our society and by the year two thousand its been estimated that over fifty million people in this country will be over the age of sixty-five. We as physical educators must start preparing to meet the challenges which are going to be presented to us by this growing number. Worthwhile and relevant programs need to be developed along with specific guidelines for the practitioners to follow when designing skill development programs for the aged. By developing guidelines or what I refer to as learning recipes, the physical educators of today and tomorrow will be better prepared to meet these challenges head on and more likely to make positive contributions to the aged in our society. By using the following learning recipe, physical educators will become more effective teachers of the aged.

LEARNING RECIPE FOR THE AGED

Start with ½ cup of SAFETY
Add 1 pint of RELEVANCY
2 teaspoons of PROGRESSION
1 package of MATURITY
Combine with 3 oz. of MOTIVATION
Add 1 3/4 tablespoons of PRACTICE
Mix in a pinch of ENCOURAGEMENT
A slice of FUN
2½ cans of FEEDBACK
Stir with LOVE
and Bake until LEARNING OCCURS

One-half cup of safety is the first ingredient which educators must include in their recipe if they want to become more effective teachers of the aged. The aged must be made to perceive that they are both physically and emotionally "safe" in the learning environment and in the actual activities which they are performing if maximum skill improvement is to occur. Fear, undue anxiety, and worry have all been shown by researchers to retard skill development within all segments of our population, including the aged (5,7,8).

As a group, the aged tend to be the most cautious of all participants and because of this, tend to avoid active participation in activities for fear of injury or embarrassment. It seems as if society has conditioned the aged to slow down, live a lifestyle more "fitting" their age and to avoid everything which might involve risk.

One pint of relevancy is the second ingredient of the learning recipe which physical educators need to understand when designing activities for the aged. Consider the question "What is relevant to a person who grew up around the turn of the century, has experienced the roaring twenties, lived through the great depression, two world wars and a number of conflicts?" Probably, his family and hard work took priority over school and activities. As physical educators, we must begin to realize that relevancy varies within the population and that things which are relevant for the twenty year old might not be relevant for the sixty year old. For example, learning shooting skills in basketball

may be relevant for the high school student who hopes someday to play for his school's team but, that same skill might not be relevant for the sixty year old. For myself, chemistry classes in college were not that important until I had an instructor who showed me how to apply the principles which I learned to my future goals. Also, in a round about way, one could say that passing chemistry was relevant to me because it was a requirement for graduation.

RELEVANCY CONTINUUM - PERFORMANCE

Not Relevant			Extremely Relevant
Bored Silly No Learning and Actual Regression Taking Place	-Take it or leave it attitude. -Depends upon the day and specific subject matter presented. -Go through the motions doing just enough to get by.	Interested	Excited to Learn

Two teaspoons of progression is the third ingredient which physical educators must add to their learning recipes. Its important for physical educators to use assessment techniques to find out the current ability level of the aged adult and then develop individualized programs based upon these assessments. The assessments should serve as a guide for educators in designing appropriate activities for the aged - activities that are challenging without being too difficult. We must find ways to challenge the aged without boring or frustrating them in activities.

The fourth ingredient which physical educators must add to their recipe is a package of maturity. Generally, people associate increasing age with increasing maturity and consider most individuals in their sixties and seventies to be fully mature. However, in order to completely understand and build programs based upon maturity, one must use a broader definition of maturity than just age. Aging doesn't automatically dictate or represent maturity and just

because we grow older and are allowed to vote, drink, and have children doesn't necessarily make one mature. When designing programs based upon maturity levels, it is important that the physical educator consider the "whole" person. The physical, emotional, intellectual, and social capabilities of the aged must be considered when developing activities for the aged since they all influence learning and achievement (5,7,8). For instance, most seven year olds do not have the intellectual capacities to pass a calculus course in mathematics, but, on the other side of the coin, the average twenty year old probably couldn't pass calculus either. Similarly, one of the most difficult skills to teach adults is learning how to swim. Everyone knows that its much easier to teach young children swimming skills because they are more emotionally mature at their current stage of development than older individuals. Granted, young children may not be as physically capable as older individuals but emotionally they are much more mature simply because they have not yet learned the fear of water.

The next ingredient, three ounces of motivation must be combined with the previously mentioned ingredients for maximum learning to occur within the aged. Basically, there are two types of motivation, internal (doing something because it makes you feel good) and external (doing something for outside rewards, such as money, power, glory, etc.) (4,5). Money might motivate a starving college student to get an A in class or a potentially good athlete to continue to practice in hopes of obtaining a lucrative pro contract but, we as physical educators must find out ways to motivate the aged to participate in activities and to practice. We need to use motivation as a powerful tool for developing skills within the aged population. This can be accomplished by finding out what combination of internal and external rewards the specific individual responds best to, i.e. - praise, a pat on the back, a smile or simply the feeling of finally being able to accomplish something they haven't been able to do in the last twenty-five years might be the only motivation needed to promote practice.

Besides providing to the aged the most appropriate type of motivation, physical educators must be able to set new, relevant and realistic goals for their clientel - ones that are both achieveable and highly meaningful.

The sixth ingredient to successful learning is one and three-quarters tablespoons of practice. The old saying that practice makes perfect may not be true in all instances after all and practice just for the sake of practice or imperfect practice does not always result in improved performance. Practice is simply a repetition of a skill and for practice to be the most effective, it must be perfect or else improper neural pathways may be reinforced resulting in so called "bad habits." In order for practice to be perfect, the following guidelines should be followed when developing practice routines for the aged:

1. Practice the specific skills which will be required in activity (3,5,7,8).
2. Analyze errors in performance and make corrections immediately following the activity (5,7,8).
3. Specific suggestions should be made to the individual as to how to improve.
4. Always concentrate on developing correct technique.
5. Typically, the aged need additional time to perceive sensory stimuli, to store newly learned information and to perform activities, so fast moving activities and involved or complex tasks should be replaced by slower moving and individually paced activities (1,9).
6. For maximum improvement to take place, increase the quality and not the quantity of practice time. Doubling the amount of practice time will not necessarily double performance (2).
7. General training is important in activities which require more than skill, i.e. - dancing or tennis require skill, flexibility and endurance. So, flexibility exercises and aerobic activities should be encouraged in addition to the skill (2).
8. Mental practice especially the use of imagery (imagining the performance before it takes place) and the use of forewarning cues may be of value to the aged in skill acquisition (6,7).

The seventh ingredient according to the learning recipe is a pinch of encouragement. Generally speaking, our society discourages participation by the aged and the aged as a group, are conditioned to slow down, relax, take it easy and

enjoy a well earned rest. In general, society tends to shelter the aged and because of this they rarely if ever are afforded the opportunity to participate in activities. We as physical educators need to stop overprotecting our aged, provide opportunities for participation by developing sound activity programs and encourage instead of discourage participation by the aged.

The eighth learning ingredient in the recipe is a slice of fun. Individuals are more likely to participate and continue in activities if they are fun. If dieting and exercise were made fun, there wouldn't be as many individuals in this country who would be overweight, i.e. - aerobic dance, aerobic aquatics, and jazzercise are popular because they are fun. Also, if you think of the activities which you have continued to participate in after graduation, probably the ones which you still participate are the one's that are either fun, healthy, or a combination of both.

The ninth and one of the most important ingredients in the learning recipe is two and one-half cans of feedback. Simply defined, feedback is information which individuals receive either internally or externally about their performances and without it, improvement can only hope to be superficial at most. It's like baking a cake and finding out later that you forgot to put in the cake mix, you have a cake but it's not necessarily the best. An infielder in baseball who fields a ground ball and throws it over the first baseman's head into the opposing teams dugout is very likely to receive some type of feedback in the form of verbal hecklings from the crowd. Similarly, the basketball player who feels he can't miss is probably receiving some kind of positive, internal kinesthetic feedback from his muscles and as a result of this has an outstanding shooting night on the court. According to research, appropriate and timely feedback is crucial to learning and skill development (5,7,8). In order to be of maximum value to the learner, feedback needs to be offered in the following manner: (1) feedback needs to be given by the physical educator

immediately following the actual performance, (2) detailed information regarding both correct and incorrect aspects of performance should be offered, (3) specific suggestions for improvement need to be given and above all, (4) feedback should be made meaningful to the individual performers in order for full assimilation and improvement to occur.

Most physical educators and coaches are great at providing feedback by telling their students what they have done wrong but, rarely offer specific suggestions for improvement, i.e. - pulling a player out of a game because he makes a throwing error - typically, only criticism are offered and no suggestions for improvement are given and hence, skill doesn't improve. The only thing for sure that the athlete learns is that everytime he makes a throwing error, he is likely to be taken out of the game by his coach instead of learning how to correct his error in performance.

The last ingredient is love. Anyone who intends to work with the aged, genuinely must love the people whom they are working with and love doing what they are doing. Instead of saying I work with the aged, you should say and mean I love to work with the aged because it makes me feel good to see them achieve.

Summary of Specific Points Regarding Skill Acquisition and the Aged

1. Safety

   A. To limit the possibility of physical risk, make sure the aged obtain a thorough physical before participating in activities. Provide supervision by a trained physical educator.

   B. The learning environment must be made as safe as possible. i.e. - provide mats and remove large objects which may result in injury.

   C. Do everything in your power to make the environment as free from emotional risk as possible. Knowledge helps to reduce fears and misconceptions about activity. i.e. - the Lamaze method is designed to control the fears of childbirth.

   D. As a group, the aged tend to be more cautious and more self-conscious when it comes to activity. Because of this, they need a greater degree of personalized attention.

E. Older spectators need to be turned into active participants because the potential rewards of participation far outweighs the risks.

2. Relevancy

A. The physical educator must find out ways to make skills more relevant to the aged population. One way to do this is by telling them the implications or specific benefits to be achieved for the certain activities. i.e. - increased flexibility, added mobility, greater independence, additional strength and endurance.

B. The more meaningful and personal you can make a skill to the individual, the more likely the individual will learn that skill, i.e. - by perfecting eye-hand skills you will be able to participate in motor activities with your peers, relatives, and friends - playing catch with your grandchildren.

3. Progression

A. It's important to develop assessment techniques for the aged and design activities based upon those assessments. Skills which are too difficult result in feelings of frustration on the part of the learner while skills which are too easy typically result in boredom.

B. A solid basis for skill development must be established and activities which are challenging without being too difficult should be provided and built upon i.e. - babies have to learn how to roll over, sit up and generally creep before they walk and activities should be provided for the infant during each stage to stimulate development.

4. Maturation

A. Advancing age does not necessarily mean maturity and all aspects of maturity (intellectual, physical, emotional, and social) must be considered when developing programs.

B. Many older individuals 65+ may never have had opportunities to develop skills outside of their work when they were younger and because of this they may feel that they are not emotionally ready to participate in activity programs.

5. Motivation

A. The physical educator must find out ways to motivate the aged.

B. Attainable and worthwhiled goals must be set. Records of accomplishments should be kept as a method of stimulating interest, measuring improvement and setting new goals.

C. Due to the very heterogenious group, one type of motivation will not necessarily work for all individuals.

D. Provide easy access to available facilities and offer easy ways to participate for the aged.

E. Involve the aged in planning activities and provide them with opportunities to show off the skills which they have learned.

F. Positive role models, athlete of the week awards and newsletters are examples of external types of motivation which can be used as motivational devices by physical educators.

5. Practice

A. Practice should be specific to the skill which is to be learned.

B. Self-paced activities typically result in greater learning since the aged may need more time to learn and perform specific skills.

C. Mental practice and the use of forewarning cues may help improve performances.

D. Concentrate on developing correct technique in activities.

E. General types of training such as flexibility, strength and endurance may help to improve performance in activities which require more than skill.

7. Encouragement

A. We as a society need to encourage participation by the aged.

B. Encouragement helps to foster a positive self-image which leads to a healthy self-esteem. A positive self-image and healthy self-esteem usually result in better performances.

8. Fun

A. Basically, individuals are more apt to participate and continue in activities if they perceive them to be fun or enjoyable.

B. Activities can be made to be enjoyable, i.e. - aerobic dance, square dance, etc.

9. Feedback

A. Appropriate and immediate feedback must be offered to the aged for maximum improvement to take place.

B. Physical educators must praise correct performances, point out specific mistakes and offer specific suggestions for improvement.

10. Love

A. Show by your actions and deeds that you are sincerely interested in your clients as individuals. Be not only a teacher but a friend.

In conclusion, by following the aforementioned learning recipe and by adding the right ingredients, physical educators can make a positive impact on skill development within the aged. The most effective teachers will be those who (1) consider the maturation level of their clients, (2) design activities which are fun, (3) provide safe learning environments, (4) provide expertise in developing practice routines, (5) use motivational techniques to inspire, (6) offer tons of encouragement, (7) provide appropriate and timely feedback, (8) attempt to make activities relevant, (9) design programs based upon progression, and (10) show love to their clients by their actions and deeds. If this is done, learning will become enjoyable for the aged and skills will be acquired.

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